IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex Parte Oehler

Application for Patent: 09/932,456

Filed: August 16, 2001

Group Art Unit: 2152

Examiner: LEE, PHILIP C

For:

COMPUTER SYSTEM PARTITIONING USING DATA TRANSFER ROUTING MECHANISM

APPEAL BRIEF

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1. REAL PARTY IN INTEREST

[37 CFR 41.37(c)(1)(i)]

The real party in interest is Sanmina-SCI Corporation of San Jose, California.

2. RELATED APPEALS AND INTERFERENCES

[37 CFR 41.37(c)(1)(ii)]

A Pre-Appeal Brief Request for Review was filed on July 10, 2007, along with the Notice of Appeal which precipitated the present appeal. A Pre-Appeal Brief conference was held. A copy of the Notice of Panel Decision from Pre-Appeal Brief Review dated September 27, 2007, is included herewith in the Related Proceedings Appendix.

The undersigned is not aware of any other related appeals or interferences.

3. STATUS OF CLAIMS

[37 CFR 41.37(c)(1)(iii)]

The following claims have been rejected and appealed: 1-17, 19, 21-32, 34, and 36-41.

The following claims have been cancelled: 18, 20, 33, and 35.

The claims on appeal are reproduced below in the Appendix at Section 9 of this Appeal Brief.

4. STATUS OF AMENDMENTS

[37 CFR 41.37(c)(1)(iv)]

Amendments filed with Applicants' response dated March 19, 2007, have been entered. No amendments were filed subsequent to the Final Rejection dated May 30, 2007.

5. SUMMARY OF CLAIMED SUBJECT MATTER

[37 CFR 41.37(c)(1)(v)]

The claimed invention relates generally to the partitioning of resources in computer systems. Page 1, lines 7-8. More specifically, the recent innovation represented by distributed point-to-point communication among processors in a single-platform, multi-processor system is leveraged to provide a high level of flexibility and precision in the partitioning of computer system resources. Page 4, lines 2-5.

5.1. Independent Claim 1

Claim 1 recites a computer system having "a plurality of resources including a plurality of processors." The system employs "a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors." See, for example, Fig. 3 and the corresponding description at page 7, lines 9-13. The system also includes "at least one partitioning processor for configuring the plurality of resources into a plurality of partitions." See, for example, Fig. 3 and the corresponding description at page 7, lines 9-19. Each partition includes "a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure." See, for example, page 7, lines 19-23. "[T]he portion of the point-to-point transmission infrastructure in each partition [is] distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition." See, for example, page 7, lines 19-23; page 11, lines 2-4; page 15, lines 9-11, and lines 22-23; etc. The partitioning processor configures the resources "by writing to at least one of a plurality of routing tables associated with the processors according to a previously specified partitioning schema." "[E]ach routing table represent[s] dedicated physical links between an associated processor and other ones of the plurality of processors." These dedicated physical links are part of the point-to-point transmission infrastructure. See for example, page 7, lines 19-23.

5.2. Independent Claim 23

Claim 23 is similar in scope to claim 1 and recites "a computer implemented method for use in a computer system having a plurality of resources including a plurality of processors and a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors." See, for example, Figs. 3 and 6, and the corresponding description at page 7, line 9, to page 8, line 9, and page 15, line 3, to page 16, line 22. The plurality of resources are configured into a plurality of partitions, "each partition comprising a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure." See, for example, page 15,

lines 3-11. "[T]he portion of the point-to-point transmission infrastructure in each partition [is] distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition." See, for example, page 7, lines 19-23; page 11, lines 2-4; page 15, lines 9-11, and lines 22-23; etc. "[T]he configuring of the resources [is] effected by writing to at least one of a plurality of routing tables associated with the processors according to a previously specified partitioning schema." [E]ach routing table represent[s] dedicated physical links between an associated processor and other ones of the plurality of processors. These dedicated links are part of the point-to-point transmission infrastructure. See for example, page 7, lines 19-23; and page 15, lines 3-5.

5.3. Independent Claim 36

Claim 36 has a different scope than claims 1 or 23, and recites a computer system having "a plurality of resources including a plurality of processors." The system employs "a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors." See, for example, Fig. 3 and the corresponding description at page 7, lines 9-13. The system also includes "at least one partitioning processor for configuring the plurality of resources into a plurality of partitions." See, for example, Fig. 3 and the corresponding description at page 7, lines 9-19. Each partition includes "a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure." See, for example, page 7, lines 19-23. "[T]he portion of the point-to-point transmission infrastructure in each partition [is] distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition." See, for example, page 7, lines 19-23; page 11, lines 2-4; page 15, lines 9-11, and lines 22-23; etc. The partitioning processor configures the resources "by enabling operation of at least one dedicated physical link between at least one of the plurality of processors and at least one other one of the plurality of processors according to a previously specified partitioning schema." Each such link corresponds "to a portion of the point-to-point transmission infrastructure." See for example, page 4, lines 15-19; page 7, lines 19-23; and page 20, lines 1-7.

5.4. Independent claim 39

Claim 39 is similar in scope to claim 36 and recites "a computer implemented method for use in a computer system having a plurality of resources including a plurality of processors and a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors." See, for example, Figs. 3 and 6, and the corresponding description at page 7, line 9, to page 8, line 9, and page 15, line 3, to

page 16, line 22. The plurality of resources are configured into a plurality of partitions, "each partition comprising a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure." See, for example, page 15, lines 3-11. "[T]he portion of the point-to-point transmission infrastructure in each partition [is] distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition." See, for example, page 7, lines 19-23; page 11, lines 2-4; page 15, lines 9-11, and lines 22-23; etc. "[T]he configuring of the resources [is] effected by enabling operation of at least one dedicated physical link between at least one of the plurality of processors and at least one other one of the plurality of processors according to a previously specified partitioning schema. Each such link corresponds "to a portion of the point-to-point transmission infrastructure." See for example, page 4, lines 15-19; page 7, lines 19-23; and page 20, lines 1-7.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

[37 CFR 41.37(c)(1)(vi)]

The issue which Appellant believes to be most pertinent to the present appeal:

None of the partitioning techniques described in the art of record may be combined with what the Examiner refers to as Applicant's admitted prior art (AAPA) to result in a partitionable system or partitioning method in which "the portion of the point-to-point transmission infrastructure in each partition [is] distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition." As will be discussed, this is due in large part to the fact that the nature of the interconnects employed by the prior art require significantly different approaches to partitioning than those described and claimed in the present application. Their teachings are therefore not relevant here.

The specific grounds of rejection to be reviewed are as follows:

Ground I: Whether claims 1-4, 6-10, 12, 13, 16, 21, 23-26, 28, 31, 36-37, 39, and 40 are unpatentable under 35 U.S.C. 103(a) over AAPA in view of U.S. Patent No. 5,303,383 (Neches).

Ground II: Whether claims 1, 15, 23, 30, 36, and 39 are unpatentable under 35 U.S.C. 103(a) over AAPA and Neches in view of U.S. Patent No. 6,961,761 (Masuyama).

Ground III: Whether claims 1, 5, 11, 19, 22, 23, 27, 34, 36, 38, 39 and 41 are unpatentable under 35 U.S.C. 103(a) over AAPA and Neches in view of U.S. Patent Publication No. US 2001/0037435 A1 (Van Doren).

Ground IV: Whether claims 1, 14, 17, 23, 29, 32, 36, and 39 are unpatentable under 35 U.S.C. 103(a) over AAPA and Neches in view of U.S. Patent No. 6,188,759 (Lorenzen).

7. ARGUMENT

[37 CFR 41.37(c)(1)(vii)]

7.1. Ground I

Claim 1 is representative of the group of claims rejected over the combination of AAPA and Neches, and so the following argument focuses on the patentability of claim 1 over this combination. However, it will be understood with reference to these arguments that claims 2-4, 6-10, 12, 13, 16, 21, 23-26, 28, 31, 36-37, 39, and 40 are patentable over this combination for at least the reasons discussed. The claims in this group therefore stand or fall together.

Neches describes a multistage interconnect network (MIN) for interconnecting processors modules (PM). See Abstract and FIG. 2. It is clear from the figures and the description that network 14 is a switch fabric which provides multiple, redundant, and dynamically configurable paths between each PM 12 and any other PM 12. See, for example, column 7, lines 10-27. This is clearly distinguishable form the "point-to-point transmission infrastructure" which includes "dedicated physical links" between processors described and claimed in the present application. That is, as discussed below, Neches' multistage interconnect network is a configurable hierarchical switch fabric and is therefore not applicable here.

The references in Neches to "point-to-point" communication are clearly references to higher level communications among processors and refer to logical or virtual connections between processor modules rather than dedicated physical links as described and claimed in the present application. That is, as used in Neches, the term "point-to-point" refers to a communication protocol rather than the transmission infrastructure which, instead of being a point-to-point transmission infrastructure, is a hierarchical switch fabric. See, for example, column 6, lines 26-51, and column 7.

In addition, references in Neches to partitioning relate to the logical grouping of processor modules which result in groups of processor modules which communicate independently of each other via the same shared resource, i.e., the MIN. See, for example, column 35, line 40 et seq. That is, while communications between different "superclusters" of processor modules do not interfere, they must continue to use the same physical transmission infrastructure. Thus, it is *impossible* for the technique described in Neches to result in a partitioning schema in which "the portion of the point-to-point transmission infrastructure in each partition [is] distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition." To the contrary, the transmission infrastructure in Neches' partitions *must* be overlapping.

Moreover, the Examiner's combination of Neches with the AAPA is inappropriate and should not stand. That is, the multistage interconnect network (MIN) of Neches is not compatible with the system described with reference to Fig. 2 of the present application. Neches' MIN is operable to directly route packets from every one of the input ports to every one of the output ports (see FIGs. 1 and 2 and the corresponding description). It is clear that in order for Neches' system to operate, the MIN must operate as an undivided, shared resource among the processor modules. Thus, there is no way to partition the MIN in the manner claimed in the present application and have it remain operable.

By contrast, the point-to-point communication links of the system described in the Background of the Invention of the present application are *dedicated* links between the processing nodes which, in some cases, makes it necessary for indirect transmissions between two processing nodes (i.e., via an intermediate processing node).

Because Neches' MIN is an indivisible switch fabric which directly connects any one of the connected processor modules to any other one of the processor modules, the partitioning technique described in Neches would have to be significantly altered to be operable in the kind of point-to-point infrastructure described in the present application with reference to Fig. 2. Neches does not contain any teachings as to how this might be accomplished, or even any suggestions that such a result would be desirable. Therefore, because the technique taught by the Neches reference is not compatible in its disclosed form with the system shown in Fig. 2 of the present application, the references may not be properly combined.

7.2. Ground II

Claim 1 is representative of the claims rejected over the combination of AAPA, Neches, and Masuyama, and the following arguments therefore refer to claim 1. Claims 15, 23, 30, 36, and 39 are also patentable over this combination for at least the reasons discussed. The claims in this group therefore stand or fall together.

Masuyama refers to a system interconnect 120 in its background (col. 1, lines 27-31) and in its detailed description (col. 2, lines 43-45). The interconnect is shown in Figure 1 as being shared by all CPU nodes 105, memory nodes 110, and I/O nodes 115. Masuyama states that "interconnect 120 may include components, such as packet routers and/or crossbar switches," or "may be, for example, a global interconnect, or include a router." In other words, Masuyama's interconnect is an indivisible, shared interconnect by which the various nodes in the system communicate. Thus, as with the MIN of Neches, the interconnect of Masuyama cannot enable the partitioning of its system into "a plurality of partitions" in which the portion of the point-to-point transmission infrastructure in each partition is "distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition."

In addition, given the similarity between Masayuma's interconnect and Neches' MIN, the combination of Masayuma with AAPA must fail for reasons similar to those discussed above with reference to the combination of AAPA and Neches.

7.3. Ground III

Claim 1 is representative of the claims rejected over the combination of AAPA, Neches, and Van Doren, and the following arguments therefore refer to claim 1. Claims 5, 11, 19, 22, 23, 27, 34, 36, 38, 39 and 41 are also patentable over this combination for at least the reasons discussed. The claims in this group therefore stand or fall together.

The addition of the Van Doren reference to the combination of AAPA and Neches does not make up for the deficiencies of this combination and falls short of what is required to anticipate or obviate the claimed invention.

The Applicants further reassert their objection to the Examiner's combination of Van Doren with the description from the Background of the Invention. Not only is the

motivation to combine lacking, but the partitioning technique of Van Doren is not compatible with the system described with reference to Fig. 2 of the present application. That is, the hierarchical switch fabric which interconnects the processors in Van Doren is operable to directly route packets from every one of the nodes to every other one of the nodes (see the description of HS 400 with reference to Fig. 4 beginning in paragraph [0045]). In addition, it is clear that regardless of the number and nature of the partitions described in Van Doren the hierarchical switch fabric must still operate as a shared resource among the various partitions, i.e., there is no way to partition the switch fabric in the manner claimed and have it remain operable.

By contrast, the point-to-point communication links of the system described in the Background of the Invention of the present application are *dedicated* links between the processing nodes which, in some cases, makes it necessary for indirect transmissions between two processing nodes (i.e., via an intermediate processing node).

Because the partitioning technique described in Van Doren depends on the hierarchical switch fabric which directly connects any one of the nodes to any other one of the nodes, the technique would have to be significantly altered to be operable in the kind of point-to-point infrastructure described in the present application with reference to Fig. 2. Van Doren does not contain any teachings as to how this might be accomplished, or even any suggestions that such a result would be desirable. Therefore, because the technique taught by the Van Doren reference is not compatible in its disclosed form with the system shown in Fig. 2 of the present application, the references may not be properly combined.

Even if the combination asserted by the Examiner was appropriate, claim 1 recites additional bases by which the claimed invention may be distinguished. That is, as mentioned above, by its very nature, Van Doren's switch fabric must be shared as a common resource among any partitions in that system. By contrast, claim 1 of the present application recites that the portion of the point-to-point transmission infrastructure in each partition is "distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition." This is a result of the dedicated nature of the point-to-point links of which the point-to-point transmission infrastructure is comprised. See, for example, the present specification at page 7, lines 19-23; page 11, lines 2-4; page 15, lines 9-11, and lines 22-23; etc. This limitation is clearly distinguishable from Van Doren's switch fabric which must remain undivided to facilitate its partitioning scheme.

7.4. Ground IV

Claim 1 is representative of the claims rejected over the combination of AAPA, Neches, and Lorenzen, and the following arguments therefore refer to claim 1. Claims 14, 17, 23, 29, 32, 36, and 39 are also patentable over this combination for at least the reasons discussed. The claims in this group therefore stand or fall together.

Lorenzen is not relevant to the claimed invention and fails to make up the deficiencies of the combination of AAPA and Neches. Lorenzen teaches techniques for routing calls in a telecommunications network in which a network processor dynamically alters routing recommendations stored in destination node tables in response to congestion reported by telecommunications switches in the network. These recommendations are used by telecommunications switches to route telecommunications signals with the network. See Abstract.

The teachings of Lorenzen are distinguishable from the claimed invention in a number of respects. Most notably, the described technique is for altering routing recommendations in a telecommunications network, not the partitioning of resources in a computer system. No actual partitioning of resources in Lorenzen's telecommunications network occurs. That is, the only things that change are the possible routing paths employed by the telecommunications switches. The only reference to partitioning made by Lorenzen is to note that execution of the dynamically controlled routing technique may be distributed among several processors, i.e., a kind of load balancing. See column 13, lines 24-35. The partitioning of resources in a computer system as claimed by the present invention is simply not described.

Even assuming that the combination of Lorenzen with AAPA and Neches was appropriate, the claims of the present invention are further distinguishable in that this combination does not teach or suggest "a plurality of partitions" in which the portion of the point-to-point transmission infrastructure in each partition is "distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition."

8. CONCLUSION

In view of the foregoing, it is respectfully submitted that the Examiner's rejections of the claims of the present application as being unpatentable over the combination of AAPA and Neches, or these references in combination with any of Masuyama, Van Doren, and Lorenzen is erroneous. Accordingly, the rejection of claims 1-17, 19, 21-32, 34, and 36-41 under 35 U.S.C. §103(a) should be reversed.

Respectfully submitted,
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9. CLAIMS APPENDIX

[37 CFR 41.37(c)(1)(viii)]

CLAIMS ON APPEAL

1. (Previously presented) A computer system, comprising:

a plurality of resources including a plurality of processors;

a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors; and

at least one partitioning processor for configuring the plurality of resources into a plurality of partitions, each partition comprising a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure, the portion of the point-to-point transmission infrastructure in each partition being distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition, the at least one partitioning processor being operable to configure the resources by writing to at least one of a plurality of routing tables associated with the processors according to a previously specified partitioning schema, each routing table representing dedicated physical links between an associated processor and other ones of the plurality of processors, the links corresponding to portions of the point-to-point transmission infrastructure.

2. (Original) The computer system of claim 1 wherein the plurality of resources further includes at least one of a memory device, a memory range, an I/O bus, I/O devices coupled to an I/O bus, and an interrupt mechanism for routing interrupts.

3. (Original) The computer system of claim 1 wherein the plurality of resources includes an I/O switch, the I/O switch having one of the routing tables associated therewith representing links between the I/O switch, at least one of the processors, and at least one I/O resource.

4. (Original) The computer system of claim 3 wherein the at least one I/O resource comprises at least one of an Ethernet device and a SCSI device.

5. (Original) The computer system of claim 1 wherein each routing table comprises a table of entries, each of selected ones of the entries associating an address of one of the resources with one of the processors and a link for connecting with the one of the processors.

6. (Original) The computer system of claim 1 wherein the distributed point-to-point transmission infrastructure comprises a coherent HyperTransport (cHT) infrastructure.

7. (Original) The computer system of claim 1 wherein the distributed point-to-point transmission infrastructure interconnects the processors using a ring topology.

8. (Original) The computer system of claim 1 wherein the distributed point-to-point transmission infrastructure interconnects the processors using a mesh topology.

9. (Original) The computer system of claim 1 wherein the distributed point-to-point transmission infrastructure directly connects each of the processors with every other one of the processors.

10. (Original) The computer system of claim 1 wherein the at least one partitioning processor comprises at least one of the plurality of processors interconnected by the distributed point-to-point transmission infrastructure.

11. (Original) The computer system of claim 1 wherein the at least one partitioning processor is separate from the plurality of processors interconnected by the distributed point-to-point transmission infrastructure.

12. (Original) The computer system of claim 11 further comprising a boot memory for facilitating initialization of the computer system, the boot memory having computer program instructions stored therein for facilitating operation of at least one of the plurality of processors as the at least one partitioning processor.

13. (Original) The computer system of claim 1 wherein the previously specified partitioning schema is generated in response to an event occurring during operation of the computer system.

14. (Original) The computer system of claim 13 wherein the event comprises one of initialization of the computer system, a failure of at least one of the resources, a change in operating load associated with at least one of the resources, passage of a period of time, use of particular software, and a change in available power resources.

15. (Original) The computer system of claim 1 further comprising at least one partitioning processor link for connecting the at least one partitioning processor with a user interface, and wherein the previously specified partitioning schema is specified by a user of the computer system via the user interface and the at least one partitioning processor link.

16. (Original) The computer system of claim 1 wherein the at least one partitioning processor is operable to generate the routing tables upon initialization of the computer system.

17. (Original) The computer system of claim 1 wherein the at least one partitioning processor is operable to alter the at least one of the routing tables during operation of the computer system.

18. (Canceled)

19. (Original) The computer system of claim 18 wherein at least one of the plurality of partitions comprising a functional subset of the plurality of resources.

20. (Canceled)

21. (Original) The computer system of claim 1 wherein the at least one partitioning processor comprises one partitioning processor.

22. (Original) The computer system of claim 1 wherein the at least one partitioning processor comprises more than one partitioning processor.

23. (Previously presented) A computer implemented method for use in a computer system having a plurality of resources including a plurality of processors and a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors, the method comprising configuring the plurality of resources into a plurality of partitions, each partition comprising a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure, the portion of the point-to-point transmission infrastructure in each partition being distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition, the configuring of the resources being effected by writing to at least one of a plurality of routing tables associated with the processors according to a previously specified partitioning schema, each routing table representing dedicated physical links between an associated processor and other ones of the plurality of processors, the links corresponding to portions of the point-to-point transmission infrastructure.

24. (Original) The method of claim 23 wherein the plurality of resources includes an I/O switch, the I/O switch having one of the routing tables associated therewith representing links between the I/O switch, at least one of the processors, and at least one I/O resource.

25. (Original) The method of claim 24 wherein the distributed point-to-point transmission infrastructure comprises a non-coherent HyperTransport (ncHT) infrastructure.

26. (Original) The method of claim 23 wherein configuring the plurality of resources is achieved using at least one partitioning processor which comprises at least one of the plurality of processors interconnected by the distributed point-to-point transmission infrastructure.

27. (Original) The method of claim 23 wherein configuring the plurality of resources is achieved using at least one partitioning processor which is separate from the plurality of processors interconnected by the distributed point-to-point transmission infrastructure.

28. (Original) The method of claim 23 further comprising generating the previously specified partitioning schema in response to an event occurring during operation of the computer system.

29. (Original) The method of claim 28 wherein the event comprises one of initialization of the computer system, a failure of at least one of the resources, a change in operating load associated with at least one of the resources, passage of a period of time, use of particular software, and a change in available power resources.

30. (Original) The method of claim 23 further comprising receiving the previously specified partitioning schema as specified by a user of the computer system.

31. (Original) The method of claim 23 wherein writing to the at least one of the plurality of routing tables comprises generating the plurality of routing tables upon initialization of the computer system.

32. (Original) The method of claim 23 wherein writing to the at least one of the plurality of routing tables comprises altering the at least one of the routing tables during operation of the computer system.

33. (Canceled)

34. (Previously presented) The method of claim 33 wherein at least one of the plurality of partitions comprising a functional subset of the plurality of resources.

35. (Canceled)

36. (Previously presented) A computer system, comprising:

a plurality of resources including a plurality of processors;

a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors; and

at least one partitioning processor for configuring the plurality of resources into a plurality of partitions, each partition comprising a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure, the portion of the point-to-point transmission infrastructure in each partition being distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition, the at least one partitioning processor being operable to configure the resources by enabling operation of at least one dedicated physical link between at least one of the plurality of processors and at least one other one of the plurality of processors according to a previously specified partitioning schema, the at least one link corresponding to a portion of the point-to-point transmission infrastructure.

37. (Previously presented) The computer system of claim 36 wherein enabling operation of the at least one link comprises writing to at least one of a plurality of routing tables associated with the processors according to the previously specified partitioning schema.

38. (Previously presented) The computer system of claim 36 wherein enabling operation of the at least one link comprises closing at least one switch associated with the at least one link according to the previously specified partitioning schema.

39. (Previously presented) A computer implemented method for use in a computer system having a plurality of resources including a plurality of processors and a distributed point-to-point transmission infrastructure for interconnecting the plurality of processors, the method comprising configuring the plurality of resources into a plurality of partitions, each partition comprising a subset of the plurality of resources and a portion of the point-to-point transmission infrastructure, the portion of the point-to-point transmission infrastructure in each partition being distinct from and non-overlapping with the portion of the point-to-point transmission infrastructure in each other partition, the configuring of the resources being effected by enabling

operation of at least one dedicated physical link between at least one of the plurality of processors and at least one other one of the plurality of processors according to a previously specified partitioning schema, the at least one link corresponding to a portion of the point-to-point transmission infrastructure.

40. (Previously presented) The method of claim 39 wherein enabling operation of the at least one link comprises writing to at least one of a plurality of routing tables associated with the processors according to the previously specified partitioning schema.

41. (Previously presented) The method of claim 39 wherein enabling operation of the at least one link comprises closing at least one switch associated with the at least one link according to the previously specified partitioning schema.

10. EVIDENCE APPENDIX

[37 CFR 41.37(c)(1)(ix)]

No evidence has been submitted pursuant to §§ 1.130, 1.131, or 1.132 of 37 CFR, nor has any other evidence beyond the art of record been entered by the examiner.

11. RELATED PROCEEDINGS APPENDIX

[37 CFR 41.37(c)(1)(x)]

Included in this appendix is a copy of the Notice of Panel Decision from Pre-Appeal Brief Review dated September 27, 2007.

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,456	08/16/2001	Richard R. Oehler	NWISP001	3395

22434 7590 09/27/2007

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ART UNIT	PAPER NUMBER
2152	

MAIL DATE	DELIVERY MODE
09/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination	
	09/932,456	OEHLER ET AL.	
	Philip C. Lee	Art Unit: 2152	

Document Code - AP.PRE.DEC

Notice of Panel Decision from Pre-Appeal Brief Review

This is in response to the Pre-Appeal Brief Request for Review filed 7/10/07.

1. ☐ **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

☐ The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
☐ The request does not include reasons why a review is appropriate.
☐ A proposed amendment is included with the Pre-Appeal Brief request.
☐ Other: .

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2. ☒ **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

☒ The panel has determined the status of the claim(s) is as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: *1-17, 19, 21-32, 34 and 36-41*.
Claim(s) withdrawn from consideration: _____.

3. ☐ **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4. ☐ **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) *Philip C. Lee*.

(2) *Bunjob Jaroenchonwanit*.

(3) *Lynne H Browne*
Appeal Practice Specialist, TQAS.

(4)_____.